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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/557,048	04/21/2000	Ron Nevo	004198.P011X	7242
23419	7590	05/04/2004	EXAMINER	
COOLEY GODWARD, LLP 3000 EL CAMINO REAL 5 PALO ALTO SQUARE PALO ALTO, CA 94306			LY, ANH VU H	
			ART UNIT	PAPER NUMBER
			2667	13

DATE MAILED: 05/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/557,048

Applicant(s)

NEVO ET AL.

Examiner

Anh-Vu H Ly

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 12 February 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-38 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 3-10, 15-22 and 25-32 is/are allowed.
- 6) ☒ Claim(s) 1, 2, 11-14, 23, 24 and 33-38 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Response to Amendment***

1. This communication is in response to applicant's amendment filed February 12, 2004. The proposed amendment to the claims has been entered. Claims 1-38 are currently pending.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-2, 11-14, 23-24, and 36-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Joeressen, O J. (WO 99/29126) in view of Minde et al (US Patent No. 6,201,960 B1). Hereinafter, referred to as Joeressen and Minde.

With respect to claims 1, 13, 23, 37, and 38, Joeressen discloses in Fig. 4, the mobile terminal 100 of Fig. 5 has a transceiver 40 for use in the LPRF network 2 (a first wireless network operating a first protocol) and a cellular phone unit 62 which allows the terminal to communicate in the mobile network 106 (a second wireless network operating a second protocol) (at least one wireless transceiver to transmit and receive signals in accordance with a first and a second protocol to and from first and second network devices of a first and a second wireless network communicatively coupled to the apparatus), and a control unit 80 (at least one controller manager) for controlling the integration of mobile network 106 and the LPRF network 2 (at least one controller manager coupled to at least one wireless transceiver to operate at least one wireless transceiver to perform transmits and receives in accordance with first and second

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protocols in a coordinated manner). Joeressen discloses in Figs. 7-9, different allocation patterns made by the control unit 80 for controlling the transmissions and receptions of the terminal in order to avoid critical concurrent activities (quality of service criteria) in the first and second communication networks (controller manager taking into consideration quality of service criteria to be achieved for the respective protocols). Joeressen does not disclose wherein the quality of service criteria is based at least in part upon a first quality metric reflective of a first frequency of error maintained for the first protocol. Minde discloses (col. 2, lines 14-24) that a predominant factor affecting speech quality in digital systems is the bit error rate (BER). The BER is the frequency at which bit errors are introduced into the transmitted frames. Bit errors tend to introduce during transmission over the air interface. Minde, further, discloses (col. 2, line 60 – col. 3, line 31) a method and system for measuring the speech quality in a mobile telecommunications network. It would have been obvious to one having ordinary skill in the art at the time the invention was made to include QoS in the digital communications by measuring the bit error rate in the received frames in Joeressen's system, as suggested by Minde, to determine which areas in the network are experiencing quality problems.

With respect to claims 2, 14, 24, and 36, Joeressen discloses in Fig. 4, the mobile terminal 100 of Fig. 5 has a transceiver 40 for communicating data packets in LPRF network 2 (at least one controller manager is equipped with logic to determine messages types of first messages to be transmitted to a selected one or selected ones of first network devices in accordance with first protocol) and a cellular phone unit 62 for communicating voice signals in the mobile network 106. Joeressen does not disclose at least one controller manager is equipped

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with logic to give priority to first messages of first protocol network over second messages of second protocol network if message types of first messages are determined of a multi-media type. However, it is known in the art that highly sensitive traffic such as video and audio data are assigned with higher prioritized level over text traffic such as email. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to include the feature of assigning multimedia messages as higher prioritized messages in Joeressen's system, since video and audio messages (multimedia messages) are not tolerated to high transmissions delays.

With respect to claim 11, Joeressen discloses in Fig. 4, the mobile terminal 100 of Fig. 5 has a transceiver 40 for use in the LPRF network 2 (first protocol is Bluetooth protocol) and a cellular phone unit 62, which allows the terminal to communicate in the mobile network 106. Joeressen does not disclose that the mobile network 106 is selected from a group consisting of Bluetooth, 802.11 frequency hopping, 802.11 direct sequence, 802.11a, 802.11b, and Home RF. However, Bluetooth, 802.11 frequency hopping, 802.11 direct sequence, 802.11a, 802.11b, and Home RF, etc... are known in the art as different protocol schemes for transmitting information among devices in wireless local area network. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to substitute the mobile network 106 to another selected network such as a network employing Bluetooth, 802.11 frequency hopping, 802.11 direct sequence, etc... in Joeressen's system, to transmit information among devices in a network since those networks are known in the art.

With respect to claim 12, Joeressen discloses in Fig. 4, the mobile terminal 100 of Fig. 5 (computer having a form factor selected from a group of a desktop type, a notebook type and a palm size type) has a transceiver 40 for use in the LPRF network 2 and a cellular phone unit 62 which allows the terminal to communicate in the mobile network 106.

3. Claims 33-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over.

Joeressen, O J. (WO 99/29126) in view of Rappaport et al (US Patent No. 6,477,373 B1).

Hereinafter, referred to as Joeressen and Rappaport.

With respect to claims 33-35, Joeressen discloses in Fig. 4, the mobile terminal 100 of Fig. 5 has a transceiver 40 for use in the LPRF network 2 (a first wireless network operating a first protocol) and a cellular phone unit 62 which allows the terminal to communicate in the mobile network 106 (a second wireless network operating a second protocol) (at least one wireless transceiver to transmit and receive signals in accordance with a first and a second protocol to and from first and second network devices of a first and a second wireless network communicatively coupled to the apparatus), and a control unit 80 (at least one controller manager) for controlling the integration of mobile network 106 and the LPRF network 2 (at least one controller manager coupled to at least one wireless transceiver to operate at least one wireless transceiver to perform transmits and receives in accordance with first and second protocols in a coordinated manner. Joeressen does not disclose taking into consideration the relative priority of message types to be transmitted in accordance with the respective protocols. Rappaport discloses (see Abstract) a system and method supporting different call types simultaneously. Access to network connectivity resources can be provided according to call

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session priority based on call session type, platform mobility, hand-off status, and user class criteria. Wherein, voice calls (time sensitive stream traffic) may preempt resources of time insensitive data calls. It would have been obvious to one having ordinary skill in the art at the time the invention was made to include QoS in digital communications in Joeressen's system, as suggested by Rappaport, to support different prioritize applications.

***Allowable Subject Matter***

4. Claims 3-10, 15-22, and 25-32 are allowed.

The following is an examiner's statement of reasons for allowance:

The prior art does not teach or fairly suggest wherein at least one controller manager is equipped with logic to maintain a quality metric reflective of frequency of error for each voice stream, and to make its priority determination for messages competing to be transmitted to first and second network devices in accordance with first and second protocols in view of quality metric maintained for each voice stream, as specified in independent claims 3, 15, and 25.

***Response to Arguments***

5. Applicant's arguments with respect to claims 1-38 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO**

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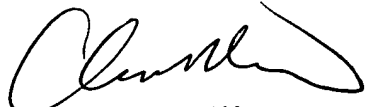
MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anh-Vu H Ly whose telephone number is 703-306-5675. The examiner can normally be reached on Monday-Friday 7:00am - 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham can be reached on 703-305-4378. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

avl

  
CHI PHAM  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600 8/29/07